

**Notice of Allowability**

Application No.

10/705,912

Applicant(s)

LEE, BYUNG TAE

Examiner

Elizabeth Keaney

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 13 November 2003.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☒ The drawings filed on 13 November 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 11/13/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**DETAILED ACTION**

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Allowable Subject Matter***

Claims 1-24 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Re claims 1-16: The best prior art of record discloses a cathode ray tube comprising: a front panel, a fluorescent screen, a funnel, an electron gun, a deflection yoke, a holder and a ferrite core. However, the prior art fails to teach or fairly suggest a cathode ray tube wherein the ferrite core is exterior to the vertical deflection coils and a cross section of the portion of the ferrite core proximate to the screen part of the funnel includes diagonal regions, horizontal regions and vertical regions and wherein the thickness of the diagonal regions is less than the thickness of the horizontal and vertical regions, as claimed in claim 1. Claims 2-16 are allowable by virtue of their dependency.

Re claims 17-13: The best prior art of record discloses a cathode ray tube comprising: a front panel, a fluorescent screen, a funnel, an electron gun, a deflection yoke, a holder and a ferrite core. However, the prior art fails to teach or fairly suggest a cathode ray tube comprising a ferrite core exterior to the vertical deflection coils, wherein the exterior cross section of the portion of the ferrite core proximate to the neck part of the funnel is substantially circular, an interior cross section of the portion of the

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core proximate to the neck part is substantially circular, an exterior cross section of the ferrite core proximate to the screen part of the funnel is substantially circular, an interior cross section of the ferrite core proximate the screen part is non-circular, and wherein the interior cross section of the ferrite core proximate to the screen part includes a diagonally arranged curvature, a horizontally arranged curvature, and a vertically arranged curvature, wherein the diagonally arranged curvature has a radius that is less than a radius of the horizontally and vertically arranged curvatures, as claimed in claim 17. Claims 18-23 are allowable by virtue of their dependency.

Re claim 24: The best prior art of record discloses a deflection yoke for a cathode ray tube comprising a ferrite core. However, the prior art fails to teach or fairly suggest the ferrite core having a first end, a second end opposing the first end, an interior surface and an exterior surface, wherein a portion of the interior surface proximate the first end has a cross section that is non-circular and wherein a portion of the exterior surface proximate the first end has a cross section that is circular; and a plurality of vertical and horizontal deflection coils within the ferrite core, wherein a portion of the plurality of at least one of the vertical and horizontal deflection coils proximate the first end has a cross section that is rectangular, as claimed in claim 24.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent 6,914,505 teaches a ferrite core having a diagonal thickness smaller than a vertical and horizontal thickness but the vertical coils are bound around the outer portion of the core.
- US Patent 6,380,698 teaches a first end of the ferrite core having an interior that is non-circular, an exterior that is circular, however the cross section of the vertical and horizontal coils are not rectangular.
- US Patent 6,696,907 teaches a first end of a ferrite core having a circular interior and a circular exterior and a second side having a rectangular interior and a rectangular exterior.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Keaney whose telephone number is (571)272-2489. The examiner can normally be reached on Monday, Tuesday, Thursday, Friday 7:30-6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571)272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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